

## Sequence Listing

SEQ ID NO:1 (Nucleotide coding sequence for AAC74854.1 (ADS1) protein).

```
1 atgacctggt ttattgaccg gcgtctgaac ggcaaaaaca aaagcatggt gaatcgccag
5 61 cgtttttttac gccgttataa agcgcaaatt aaacagtcga tctccgaggc cattaataag
121 cgttcgggtga ctgacgtcga cagcggcgaa tccgtatcca ttcccacgga agatattagc
181 gaaccgatgt ttcattcaggg gcgtggcggt ctgcgccacc gcgtgcatcc gggcaatgac
241 catttcgtcc agaacgaccg aattgaacgt ccccaggggtg gcggcggagg ttccggcagt
301 ggtcagggcc aggccagcca ggatggtgaa ggtcaggatg aatttgtctt tcagatttcg
10 361 aaagatgagt atcttgatct gctctttgaa gatttggcct taccgaatct gaaacaaaac
421 caacaacgcc agctgaccga atataaaacg catcgggcgg gttataccgc taacggcggt
481 ccggccaata tcagcgttgt gcgttcattg cagaactcac tggcgcgacg cacagccatg
541 acggcaggca agcggcgagg acttcattgca ctggaagaga atttggccat catcagcaac
601 agtgaacctg cgcaactgct ggaagaggaa cgtctgcgca aagaaattgc agaattacgt
15 661 gccaaaattg aacgcgtccc ttttattgac accttcgatt tacgttataa gaactacgag
721 aagcggcccc atccctccag ccaggcagtg atgttttgcc tgatggacgt ttccggttca
781 atggatcaat ccactaaaga tatggctaag cgtttttata ttctgctgta tctgttcctc
841 agcagaacgt ataagaacgt ggaagtcgta tacatccgcc atcataccca ggcgaaagaa
901 gtcgatgaac atgagttttt ctactcgag gaaacaggcg gcaccattgt ttccagcgcc
20 961 ctgaaactga tggatgaggt agtgaaagag cgttataacc cggcacagtg gaatatttac
1021 gctgcacaag catcggacgg cgataactgg gccgatgact ctccgctttg ccatgaaatc
1081 ctggcgaaaa aattattacc tgttggtcgt tattacagct atatcgaaat taccgctcgt
1141 gcacatcaga cattgtggcg agaatatgag catctgcaat ctactttcga caactttgcg
1201 atgcagcaca tccgcgacca ggatgatatt tatccggtgt tccgtgaact gtttcataaa
25 1261 caaatgcaa cagctaaagg ctaa
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SEQ ID NO:2 (Protein AAC74854.1; ADS1)

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1 mtwfidrrln gknksmvnrq rflrrykaqi kqsiseaink rsvtdvdsge svsiptedis
61 epmfhggrgg lrhrvhpgnd hfvqndrier pggggggsgs gggqasqdge gqdefvfqis
121 kdeyldllfe dlalpnlkqn qqrqlteykt hragytangv panisvvrsl qnslarrrtam
30 181 tagkrrelha leenlaiisn sepaqlleee rlrkeiaelr akiervpfid tfdlryknye
241 krpdpsqav mfclmdvsgs mdqstkdmak rfyillylfl srtyknvevv yirhhtqake
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301 vdeheffysq etggtivssa lklmdevvke rynpaqwniy aaqasdgdnw addsplchei  
361 lakklpvr ysyieitrr ahqtlwreye hlqstfdnfa mqhirdqddi ypvfrelfhk  
421 qnatakq

SEQ ID NO:3 (the nucleotide coding sequence for AAC76768.1 (ADS2) protein)

5 1 gtgcgcagtc ggctgaaaga tgcccagagtc ccgccggaac tcaccgaaga ggtgatgtgc  
61 tatcagcaaa gccagctcct ctccacgcca cagtttattg tgcagctacc acagatcctg  
121 gacttaactgc atcgtctgaa ttctccatgg gcagaacaag cccgacagtt ggttgatgct  
181 aacagcacga tcaattcagc gttacacacg ctttttctcc agcgttggcg ttttaagtctg  
241 atcgtgcaag caacgacggt aaatcaacag ctattagaag aagaacgcga acaactgttg  
10 301 agtgaagtgc aggaacgcat gacgctgagc ggacaacttg aaccgattct cgcagataac  
361 aatactgcag ctggctcgtc gtgggatatg agcgccgggc agcttaaacy tggcgactat  
421 cagttgattg tgaaatacgg tgaatttctt aacgaacagc cggaactgaa acgcctggca  
481 gagcagctgg ggcgttctcg ggaagccaaa tcaataccgc gcaacgatgc gcagatggaa  
541 accttccgca ccatgggtgcg cgaaccggcg acggttctcg agcaggttga tggctctgcaa  
15 601 caaagcgatg atatttttacg tctcctgccg ccagaactgg cgacactagg gataacggaa  
661 ctggagtatg agttttaccg tcggctggtg gaaaaacagt tgctcaccta tcgctgcac  
721 ggtgagtcgt ggcgtgaaaa agtgatcgaa cgtccgggtg tacataaaga ttacgatgaa  
781 cagccgcgcg ggcgttttat tgtctgtgtg gatacttccg gctcaatggg cggctttaat  
841 gaacagtgtg cgaaagcggt ctgcctggcc ttgatgcgca ttgctctcgc agaaaaccgg  
20 901 cgctgctata ttatgctatt ttccaccgag atcgtccggt atgagctttc aggccacaa  
961 ggcacgaac aagcaatccg ttttttaagc cagcagtttc gtggcggcac cgatcttgcc  
1021 agttgttttc gcgccattat ggaacgcttg caaagcaggg aatggtttga tgccgatgcg  
1081 gtggtgattt ctgattttat cgctcagcgg ttgcctgacg acgtgacgag taaagtgaaa  
1141 gagctgcagc gggtagatca gcatcgcttt catgccgtgg cgatgtcggc acacggcaaa  
25 1201 cccggcatca tgcgcatttt cgatcatatc tggcgctttg ataccgggat gcgaagccgc  
1261 ctgctcagac gctggcgggc ataa

SEQ ID NO: 4 (Protein AAC76768.1; ADS2)

1 mrsrlkdarv ppelteevmc yqqsqllstp qfivqlpqil dllhrlnspw aeqarqlvda  
61 nstitsalht lflqrwrsl ivqattlnqq lleereqll sevqermtls gglepiladn  
30 121 ntaagrlwdm sagqlkrgdy qlivkygefl neqpelkrla eqlgrsreak siprndaqme  
181 tfrtmvrepv tpeqvdlq qsddilrllp pelatlgite leyefyrllv ekqllyrlh

241 geswrekvie rpvvhkdyde qprgpfivcv dtsgsmggfn eqcakafcla lmrialaenr  
301 rcyimlfste ivryelsgpq giegairfls qqfrggttdla scfraimerl qsrewfdada  
361 vvisdfiaqr lpddvtskvk elqrvhqhrf havamsahgk pgimrifdhi wrfdtgmrsr  
421 llrrwrr

5 SEQ ID NO: 5 (Nucleotide coding sequence for P10155 (ADS5) protein)

1 attttgcctt tttgttaggt ttcctaaaga caaaaaaaaaa tggaggaatc tgtaaaccac  
61 atgcagccac tgaatgagaa gcagatagcc aattctcagg atggatatgt atggcaagtc  
121 actgacatga atcgactaca ccggttctta tgtttcgggt ctgaagggtg gacttattat  
181 atcaaagaac agaagtggg ccttgaaaat gctgaagctt taattagatt gattgaagat  
10 241 ggagaggat gtgaagtgat acaagaaata aagtcattta gtcaagaagg cagaaccaca  
301 aagcaagagc ctatgctctt tgcacttgcc atttgttccc agtgcctcca cataagcaca  
361 aaacaagcag catttaaagc tgtttctgaa gtttgcgca ttcctacca tctctttact  
421 tttatccagt ttaagaaaga tctgaaggaa agcatgaaat gtggcatgtg gggctgtgcc  
481 ctccggaagg ctatagcgga ctggtacaat gagaaagggt gcatggccct tgctctggca  
15 541 gttacaaaat ataaacagag aaatggctgg tctcaciaag atctattaag attgtcacat  
601 cttaaaccct ccagtgaagg acttgcaatt gtgaccaa atattacaaa gggctggaaa  
661 gaagttcatg aattgtataa agaaaaagca ctctctgtgg agactgaaaa attattaaag  
721 tatctggagg ctgtagagaa agtgaagcgc aaaaagatg agctagaagt cattcatcta  
781 atagaagaac atagattagt tagagaacat cttttaacaa atcacttaaa gtctaaagag  
20 841 gtatggaagg ctttgttaca agaatgccg cttactgcat tactaaggaa tctaggaaa  
901 atgactgcta attcagtact tgaaccagga aattcagaag tatctttagt atgtgaaaaa  
961 ctgtgtaatg aaaaactatt aaaaagggt cgtatacatc catttcatat tttgatcgca  
1021 ttagaaactt acaagacagg tcatggtctc agagggaaac tgaagtggcg ccctgatgaa  
1081 gaaattttga aagcattgga tgctgctttt tataaaacat ttaagacagt tgaaccaact  
25 1141 ggaaaacggt tcttactagc tgttgatgtc agtgcttcta tgaaccaaag agttttgggt  
1201 agtatactca acgctagtac agttgctgca gcaatgtgca tggttgtcac acgaacagaa  
1261 aaagattctt atgtagttgc tttttccgat gaaatgggtac catgtccagt gactacagat  
1321 atgaccttac aacagggttt aatggctatg agtcagatcc cagcagggtg aactgattgc  
1381 tctcttccaa tgatctgggc tcagaagaca aacacacctg ctgatgtctt cattgtattc  
30 1441 actgataatg agacctttgc tggagggtgc catcctgcta ttgctctgag ggagtatcga  
1501 aagaaaatgg atattccagc taaattgatt gtttgtggaa tgacatcaaa tggtttcacc

1561 attgcagacc cagatgatag aggcattgtg gatatgtgcg gctttgatac tggagctctg  
1621 gatgtaattc gaaatttcac attagatatg atttaaccat aagcagcagc acgatccaga  
1681 gatccattgc catcagtgat ctactataaaa aatatacagc tacttcccag ctaatctcca  
1741 cccaatgaat gatgatggta tagtatgtgc ataattggaaa gttaccttac tg

5 SEQ ID NO: 6 (Protein P10155 (ADS5))

1 meesvngmqp lnekqiansq dgyvwqvtdm nrlhrflcfg seggtyyike qklglенаа  
61 lirliedgrg ceviqeiksf sqegrttkqe pmlfalaics qcsdistkqa afkavsevcr  
121 ipthlftfiq fkkdlkesmk cgmwgralrk aiadwynekg gmalalavtk ykqrngwshk  
181 dllrlshlqp sseglaivtk yitkgwkevh elykekalsv etekllyle avekvkrtd  
10 241 elevihliee hrlvrehllt nhlkskevkw allqemplta llrnlgkmta nsvlepgnse  
301 vslvceklcn eklkkarih pfhilialet yktghglrgk lkwrpdeeil kaldaafykt  
361 fktveptgkr fllavdvsas mnqrvlgsil nastvaaamc mvvtrtekds yvvafsdemv  
421 pcptvtdmtl qqvlmamsqi paggtcdslp miwaqktnp advfivftdn etfaggvghpa  
481 ialreyrkkm dipaklivcg mtsngftiad pddrgmldmc gfdtgaldvi rnftldmi